

Title (en)
Imaging device and imaging apparatus

Title (de)
Abbildungsgerät und Abbildungsvorrichtung

Title (fr)
Dispositif d'imagerie et appareil d'imagerie

Publication
EP 2428993 A3 20130403 (EN)

Application
EP 11179014 A 20110826

Priority
JP 2010200733 A 20100908

Abstract (en)
[origin: EP2428993A2] An imaging device includes: an imaging area in which a plurality of pixels used to acquire an image are provided; a spectrum area in which a plurality of pixels used to acquire a color spectrum are provided; and a filter that is formed above the pixels provided in the spectrum area and allows an electromagnetic wave with a desired wavelength to pass, wherein the filter is formed of a plasmon resonator that is a conductive metal structure having an unevenness structure at a predetermined pitch, and the imaging area and the spectrum area are provided on a single chip.

IPC 8 full level
H01L 27/146 (2006.01); **H04N 9/04** (2006.01)

CPC (source: EP KR US)
H01L 27/14621 (2013.01 - EP KR US); **H01L 27/14623** (2013.01 - EP US); **H01L 27/14627** (2013.01 - EP KR US);
H01L 27/14645 (2013.01 - EP KR US); **H04N 23/10** (2023.01 - KR); **H04N 23/45** (2023.01 - KR); **H04N 25/70** (2023.01 - EP KR US)

Citation (search report)
• [A] US 2008087800 A1 20080417 - TODA ATSUSHI [JP]
• [A] US 2008150057 A1 20080626 - LEE YUN-KI [KR], et al
• [A] EP 1198126 A2 20020417 - CANON KK [JP]
• [A] JOHANSEN KNUT ET AL: "Imaging surface plasmon resonance sensor based on multiple wavelengths: Sensitivity considerations", REVIEW OF SCIENTIFIC INSTRUMENTS, AIP, MELVILLE, NY, US, vol. 71, no. 9, 1 September 2000 (2000-09-01), pages 3530 - 3538, XP012038519, ISSN: 0034-6748, DOI: 10.1063/1.1287631

Cited by
FR3014245A1; EP3756224A4; EP3557628A4; EP4068365A3; US11177303B2; WO2021236336A1; WO2017132283A1; US11044446B2; US11483525B2; US11181672B2; US11387272B2; US10763295B2; JPWO2019235230A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2428993 A2 20120314; EP 2428993 A3 20130403; EP 2428993 B1 20150930; CN 102403326 A 20120404; CN 102403326 B 20160120; JP 2012059865 A 20120322; KR 101890940 B1 20180822; KR 20120025973 A 20120316; TW 201225270 A 20120616; TW I453906 B 20140921; US 2012057055 A1 20120308; US 8866950 B2 20141021

DOCDB simple family (application)
EP 11179014 A 20110826; CN 201110264769 A 20110908; JP 2010200733 A 20100908; KR 20110081014 A 20110816; TW 100128601 A 20110810; US 201113137596 A 20110829